

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:
Toshihisa Takeyama *et al.*) Group Art Unit: 1756
) Confirmation No.: 8491
Serial No.: 10/815,490) Examiner: Angebrannad, Martin J.
Filed: March, 31, 2004) Docket No.: KOT-0094

For: HOLOGRAPHIC RECORDING MEDIUM AND RECORDING METHOD THEREOF

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Toshihisa Takeyama declares and says that:

1. I am an inventor of the above-referenced U.S. Patent Application Serial No. 10/815,490 herein referred to as the application.

2. I obtained a Masters Degree in Industrial Chemistry in 1988 from Shizuoka University.

3. Since April 1988, I have been employed by Konica Corporation (now Konica Minolta Medical & Graphic, Inc.), the assignee of the above noted application. During my employment, I have been engaged in the research and study of image forming material in the Research and Development Laboratory.

4. The following materials were prepared and evaluated in accordance with the procedures set forth in Applicants specification:

Holographic recording layer forming composition 31 was prepared in the same manner as preparing Holographic recording layer forming material 14 except that thermal cationic polymerization initiator D-7 was substituted with Crivello's tris(4-hydrox-3, 5-dimethylphenyl)sulfonium hexafluoroarsinate, mp. 245-251°C (see Crivello, Col. 11, Table labeled "Sulfonium Salts").

Recording Medium 66 was prepared in the same manner as provided for preparing Recording Medium 14 by applying thermal processing condition 80°C for 0.4 hours (same as the condition for Recording Medium 14). Recording Medium 66 included the Composition 31 as modified above using Crivello's tris(4-hydrox-3, 5-dimethylphenyl)sulfonium hexafluoroarsinate.

Recording Medium 67 was prepared in the same manner as preparing Recording Medium 14 except that the thermal processing condition was changed from 80°C for 0.4 hours to 150°C for 24 hours. Recording Medium 67 included the Composition 31 as modified above using Crivello's tris(4-hydrox-3, 5-dimethylphenyl)sulfonium hexafluoroarsinate.

The prepared Recording Mediums 66 and 67 that included the holographic recording composition 31 did not solidify even after being subjected to thermal processing. Because of these results, the composition is not suitable for a holographic recording medium. It was found that Crivello's disclosed triaryl sulfonium compound did not necessarily provide a reasonable expectation of success for replacement of the sulfonium compound represented by Formula (I) of the present claim.

5. To set the heating condition to be 40°-150°C is effected to make the holographic recording medium having a thick recording layer in a shorter time than at a lower temperature. The holographic recording medium having a thick recording layer is expected to record large amount of information in the medium.

6. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent.

Date: July 5, 2007

Toshihisa Takeyama

Toshihisa Takeyama